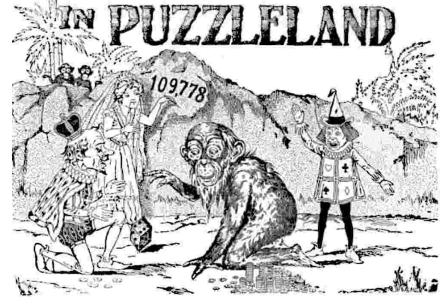


Problem J: In Puzzleland (I)

King Puzzlepate is playing a game of Bungalose craps with a wild man from an exotic island. This game uses standard dice, where opposite sides of a single die always add up to 7. When a player throws a die, he scores a number of points equal to the number on the top plus a number from any of the four sides at the player's choosing. The opponent receives a score equal to the sum of the three remaining sides; the number at the bottom of the die is discarded.

For example, if the King throws one die and a 1 comes up, he can choose any of the sides (2, 3, 4, 5). The matter of what would be the best choice depends on the score the players are trying to reach, which is agreed upon before hand. Let's say the the King chooses the 4, which would mean that the King scores 5 points while the wild man receives 10 points —this results in a net score for the King of -5. In fact, getting a 1 from the die and choosing 4 from the sides is the only possible way to score -5 points with a throw of a single die.



Playing Bungalose craps

Depending on the rules chosen, one or more dice could be used in a single turn. If a player throws K dice, and wants to make a net score S , determine the number of different ways in which that may be accomplished.

Take into account that the dice are thrown sequentially, one after the other (not all at the same time), and two “plays” are considered different if there exists an i (with $1 \leq i \leq K$) such that for the i th throw the number on top or the choice from the sides is different.

Input

Input starts with a positive integer T , that denotes the number of test cases.

Each test case is given in a line that contains two integer numbers K and S .

$$T \leq 10000 ; 1 \leq K \leq 200 ; -2000 \leq S \leq 2000$$

Output

For each test case, print the case number, followed by the number of different plays that can make a net score of S with K dice. Print the answer modulo 1000000007.

Sample Input	Output for Sample Input
4	Case 1: 1
1 -5	Case 2: 3
1 -7	Case 3: 4
2 5	Case 4: 0
2 10	